

### **R marks**

The present amendment is in response to the Official Action mailed on June 4, 2002, in which Claims 1-19 are rejected under 35 U.S.C. 102 (e). Moreover, the Examiner is of the opinion that the drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 212 and 206. Applicant has thoroughly reviewed the outstanding Office Action including the Examiner's Actions and the reference cited therein. The following remarks are believed to be fully responsive to the Office Action and, when coupled with the above amendments, are believed to render all claims at issue patentably distinguishable over the cited references.

Applicant respectfully requests reconsideration in light of the above amendments and the following remarks.

### **CLAIM AMENDMENTS - IN GENERAL**

In brief, the main substantive changes to the claims include the added recitation of independent Claim 20, and the added recitation of dependent Claims 21-28. These changes have been made for clarification and are supported by the drawings as originally filed. It is respectfully submitted that no new matter is added.

### **DRAWING AMENDMENTS - IN GENERAL**

In brief, the main changes to the specification are included in the Drawings. The main changes include the amended legend --112-- to FIG. 1A; the amended legend -- 212 -- to FIG. 2A; and the added legend -- 206-- in

red ink in FIG. 2B according to page 2 of the Office Action. It is respectfully submitted that the changes are clearly supported by the original drawings and description of the application, and therefore do not constitute any new matter.

**CLAIM REJECTIONS- 35 U.S.C. SECTION 102 (e)**

With respect to Page 2 through Page 4 of the Office Action, the Examiner rejected Claims 1-19 under 35 U.S.C. Section 102 (e) as being anticipated by US patent 6,163,050 Hisatomi et al..

Applicant respectfully traverses these rejections.

The Examiner is of the opinion that Hisatomi et al. disclose a method for forming an oxide-nitride-oxide structure, as shown in FIG. 2, in one chamber, the method comprising the steps of: providing a substrate 33, forming a first oxide layer 36-1 on the substrate, forming a first buffer layer 36-4 on the first oxide layer, forming a silicon nitride layer 36-2 on the first buffer layer, forming a second buffer layer 36-5 on the silicon nitride, and forming a second oxide layer 36-3 on the second buffer layer.

However, in the present invention, the applicant discloses a method for forming an oxide-nitride-oxide structure in one chamber. The above-mentioned method comprises providing a substrate, forming a first oxide layer on said substrate, forming a first buffer layer on said first oxide layer, forming a silicon nitride layer on said first buffer layer, forming a second buffer layer on said silicon nitride layer, and forming a second oxide layer on said second buffer layer.

In the disclosure of Hisatomi et al., the first and second oxide films 36-1 and 36-3 are formed by low-pressure CVD with **dichloro silane gas**, and N<sub>2</sub>O gas. The silicon nitride film 36-2 is formed by CVD with **dichloro silane gas**, and NH<sub>3</sub> gas (see column 6 lines 21-50). The SiO<sub>x</sub>N<sub>y</sub> films 36-4 and 36-5 are formed by CVD with **dichloro silane gas**, NH<sub>3</sub> gas, and N<sub>2</sub>O gas (see column 7 lines 35-43). In this invention, the first and second oxide layers may be formed by introducing silane gas, and N<sub>2</sub>O gas. The silicon nitride layer may be formed by introducing silane, and NH<sub>3</sub>. The silicon oxynitride layer according to this invention may be formed by introducing silane, N<sub>2</sub>O, and NH<sub>3</sub>. Thus, **the materials of Hisatomi's disclosure are different from the materials in the present claims.**

Second, because **the materials employed in the disclosure of Hisatomi et al. include dichloro silane gas, the films according to Hisatomi's disclosure**, such as the first and the second silicon oxide films 36-1 and 36-3, **comprise Cl.** However, in the present claims, **the layers of the semiconductor structure according to this invention do not include Cl.** Hence, from the viewpoint of the result, the present claims cannot be taught in view of Hisatomi's disclosure.

Third, the method disclosed in this present application is performed in one chamber. Nevertheless, **Hisatomi's disclosure has not taught that all the films are formed in one chamber.** Hence, the present claims cannot be taught in view of Hisatomi's disclosure.

Accordingly, it is respectfully submitted that Claims 1-19 as currently presented are patentable over the cited art.

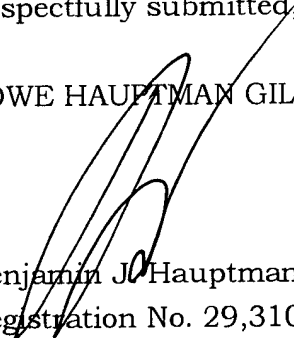
### **Conclusion**

In the light of the above amendments and remarks, Applicant respectfully submits that all pending Claims 1-19 and the added Claims 20-28 as currently presented are in condition for allowance. Applicant has thoroughly reviewed the art cited but not relied upon by the Examiner. Applicant has concluded that these references do not affect the patentability of these claims as currently presented. Accordingly, reconsideration is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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